

Commonwealth of Massachusetts
Public Employee Retirement Administration Commission

Annual Statement 2016





Philip Y. Brown

Chairman

The Honorable Suzanne Bump

Auditor of the Commonwealth Vice Chairman

Kathleen M. Fallon

Practice Area Director, Public Consulting Group

Kate Fitzpatrick

Town Manager, Town of Needham

James M. Machado

Sergeant, Fall River Police Department

Robert B. McCarthy

President Emeritus of the Professional Firefighters of Massachusetts

Jennifer F. Sullivan

Assistant Secretary for Capital, Finance, Administration & Finance

Joseph E. Connarton

Executive Director

John Parsons

General Counsel / Deputy Director

Audit Unit Staff

Caryn Shea, Chief Auditor | Scott Henderson, Deputy Chief Auditor Teri Coley, Auditor | Kevin McCarthy, Auditor | George Nsia, Auditor Carol Poladian, Auditor | Elaine Pursley, Auditor

You may leave messages for any member of PERAC's Audit Staff at telephone extension 929 in our Somerville offices.





Commonwealth of Massachusetts Public Employee Retirement Administration Commission

Five Middlesex Avenue, Suite 304 | Somerville, MA 02145 ph 617 666 4446 fax 617 628 4414 tty 617 591 8917 web www.mass.gov/perac

Instructions to Retirement Systems & Pension Funds

(Henceforth called Systems)

- (1) Date of Filing: The statement is required by law to be filed on or before May 1st.
- (2) The Name of the System must be typed or stamped at the top of all pages and schedules (and duplicate schedules), and on all inserted schedules and loose sheets.
- (3) This statement must be typewritten or prepared legibly using electronic media.
- (4) Blank Schedules will not be accepted. If no entries are to be made, type "NONE" across the schedule in question.
- (5) Each category of investment must be grouped alphabetically on appropriate schedules as listed below. Group totals in each category must be shown (sub-totals should be identified as such). Investments must be listed on a trade date basis (as opposed to the cashbook, which is on a settlement date basis). Purchases made prior to January 1st, but not settled until after December 31st, should be recorded as accounts payable and, as such, should be recorded as accounts receivable and, as such, should be listed as sold and no longer owned. *

Schedule 1

Cash

Schedule 2

Short Term Securities (Treasury Bills, Commercial Paper, Repurchase Agreements, CDs, Term Deposits, Money Market Accounts, Cooperative Shares, and Savings and Loan Shares).

Schedule 3 (A, B, and C)

Fixed Income Securities

Schedule 4 (A, B, and C)

(a) Stocks

(b) Options

Schedule 5

Pooled Funds, PRIT Fund, Mutual or Commingled Funds, International Investments, Alternative Investments, and Real Estate Investments

Schedule 6

Recap of Schedules 1 through 5

Schedule 7

Recap of all investment-related management, custodial and consultant fees

Supplementary Schedule

We are now requesting that you provide us with a supplemental schedule for Members' Balances in the Annuity Savings Account. Previously, there was some confusion as to whether this information was required. **It is required.**

(6) If the Annual Statement and Schedules do not contain the information asked for in the blanks, or are not prepared as requested above, they will NOT be accepted by the Commission.

Note: In accordance with the provisions of section 20(5)(h) and section 23(1)(c) and section 23(2)(e) of Chapter 32 of the General Laws, this statement must be filed in the office of the Public Employee Retirement Administration Commission no later than May 1, 2017. The due date for filing will be strictly enforced.

*It is critical that you determine the status of all pending transactions reported by your custodian on supplemental schedules provided by them. If any adjustments are required, these should be disclosed either in the details of accounts due in receivables, or payments pending in accounts payable. Otherwise, the supplemental schedules need to be notated for pending settlements. It may be necessary to revisit pending transactions from prior periods to properly reconcile these financial results.

Annual Statement for the Year I	Ended December 31, 2016 of the Conditions and	d Affairs of (Name of Retirement System)
Organized Under the Laws of the	Commonwealth of Massachusetts to the Public Emp	ployee Retirement Administration Commission
Date of Certificate	Effective Date	
ADMINISTRATIVE OFFICE		
Organized Under the Laws of the Commonwealth of Massachusetts to the Public Employee Retirement Administration Commiss Date of Certificate	de Telephone Number	
perjury, that we are the official last, all of the herein-described liens or claims thereon, except contained, annexed, or referre changes in fund balances, and December last, and for the year	board members of said retirement system, and assets were the absolute property of said retired as stated, and the following statements, with d to, are a full and correct exhibit of all the assofthe conditions and affairs of the said retirer	d that on the thirty-first day of December irement system, free and clear from any the schedules and explanations therein sets, liabilities, income and disbursements, ment system on the said thirty-first day of
BOARD OF RETIREMENT	Ex-Officio Member	
	(Name Typed)	(Signature)
Member who serves as Chairperson by		Term Expires
	(Name Typed)	(Signature)
	Elected Member	Term Expires
	(Name Typed)	(Signature)
	Elected Member	Term Expires
	(Name Typed)	(Signature)
	Member Appointed by Other Members	Term Expires
	(Name Typed)	(Signature)
INVESTMENT MANAGERS	41	74.11
	(Name)	(Address)
list. Attach the list to this page.	(Name)	(Address)
	(Name)	(Address)
INVESTMENT CONSULTANT		
	(Name)	(Address)
CUSTODIAN	(Name)	(Address)
	(. 10.110)	v. 1001 000)

Annu	al Statement of the	_ Retirement System for the Year Ended December 31, 2016
ANN	UAL STATEMENT BALANCE TESTS	
1.	ASSET BALANCE	
	Assets Previous Year	
	Income Current Year	
	Disbursements Current Year	()
	Assets Current Year	
2.	ASSET DIFFERENCE	
	Assets Current Year	
	Assets Previous Year	()
	Difference	
3.	INCOME DIFFERENCE	
	Income Current Year	
	Disbursements Current Year	()
	Difference	
4.	FUND CHANGE DIFFERENCE – Add Disbursement activities.	interfund transfer credits and debits respectively to Income and
	Total Fund Change Credits Current Year	r

NOTE: The difference as a result of tests 2, 3, and 4 should be the same.

Total Fund Change Debits Current Year

Difference

Annual Statement of the	Retirement System for the Year Ended December 31, 2016

ASSETS & LIABILITIES

A3	3E13 &		2016		2015		2014	
1.	1049	Cash						
2.	1100	Individually Owned Short Term Investments						
3.	1180	Fixed Income Securities (Market Value)						
4.	1101	Pooled Short Term Funds						
5.	1170	Equities						
6.	1172	Pooled Domestic Equity Funds						
7.	1173	Pooled International Equity Funds						
8.	1174	Pooled Global Equity Funds						
9.	1181	Pooled Domestic Fixed Income Funds						
10.	1182	Pooled International Fixed Income Funds						
11.	1183	Pooled Global Fixed Income Funds						
12.	1193	Pooled Alternative Investments / Private Equi	ty					
13.	1194	Pooled Real Estate Funds						
14.	1195	Pooled Domestic Balanced Funds						
15.	1196	Pooled International Balanced Funds						
16.	1197	Hedge Funds						
17.	1198	PRIT Cash Fund						
18.	1199	PRIT Core Fund						
19.	1350	Prepaid Expenses						
20.	1398	Accounts Receivable (A)						
21.	1550	Interest Due and Accrued						
22.	2020	Accounts Payable (A)	(_) (_)	()
		TOTAL		 .				
FU	NDS							
1.	3293	Annuity Savings Fund						
2.	3294	Annuity Reserve Fund						
3.	3295	Special Military Service Credit Fund						
4.	3296	Pension Fund						
5.	3298	Expense Fund						
6.	3297	Pension Reserve Fund						
то	TAL AS	SETS AT MARKET VALUE						

(A) Specific details for Accounts Receivable and Accounts Payable are to be disclosed on Schedule A.

Annual Statement of the	Retirement System fo	m for the Year Ended December 31, 2016	mber 31, 2016		
	Balance Dec. 31 Prior Year	Receipts	Interfund Transfers	Disbursements	Balance Dec. 31 Current Year
Annuity Savings Fund					
Annuity Reserve Fund					
Special Military Service Credit Fund	 				
Pension Fund					
Expense Fund					
Pension Reserve Fund					
TOTAL ALL FUNDS					

List below all transfers:

| on Account of |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Fund in the Amount of \$ |
| Fund to the |
| Transfer from |

An	nual Statement of the	Retirement System for the Yea	r Ended December 31, 20	16
RE	ECEIPTS	2016	2015	2014
1.	Annuity Savings Fund:			2014
	(a) 4891 Members' Deductions			
	(b) 4892 Transfers from Other Systems			
	(c) 4893 Members' Make up Payments and Re-deposits			
	(d) 4900 Member Payments from Rollovers			
	(e) Investment Income Credited to Members' Accounts			
	Subtotal			
2.	Annuity Reserve Fund:			
	(a) 4750 Recovery of Annuity from Reinstat	ement		
	(b) Investment Income Credited to Annuity Reserve Fund			
	Subtotal			
3.	Pension Fund:			
	(a) 4898 3(8)(c) Reimbursements from Other Systems			
	(b) 4899 Received from Commonwealth for COLA and Survivor Benefits			
	(c) 4894 Pension Fund Appropriation			
	(d) 4840 Workers' Compensation Settlemen	nts		
	(e) 4751 Recovery of Pension from Reinstat	rement		
	(f) 4841 Recovery of 91A Overearnings Subtotal			
4	Military Comica Eund			
4.	Military Service Fund: (a) 4890 Contributions Received for Military Service			
	(b) Investment Income Credited			
	Subtotal			
5.	Expense Fund:			
	(a) Investment Income Credited to Expense Fund			
	Subtotal			
6.	Pension Reserve Fund:			
	(a) 4897 Federal Grant Reimbursement			
	(b) 4895 Pension Reserve Appropriation			
	(c) 4822 Interest Not Refunded			
	(d) 4825 Miscellaneous Income			
	(e) Excess Investment Income			
	Subtotal			
	TOTAL RECEI	PTS		

An	nual	Staten	nent of the	Retirement System for the Year E	nded December 31, 20	16
DI	SBU	RSEM	ENTS			
1.	Anı	nuity 9	Savings Fund:	2016	2015	2014
		_	Refunds to Members			
			Transfers to Other Systems			
	(-,	0.00	Subtotal			
2.	Anı	nuity l	Reserve Fund:			
	(a)	5750	Annuities Paid			
	(b)	5759	Option B Refunds			
			Subtotal			
3.	Pei	nsion	Fund:			
	(a)	5751	Pensions Paid			
			Regular Pension Payments			
			Survivorship Payments			
			Ordinary Disability Payments			
			Accidental Disability Payments			
			Accidental Death Payments			
			Section 101 Benefits			
	(b)	5755	3(8)(c) Reimbursements to Other Systems			
	(c)	5752	COLAs Paid			
	(d)	5753	Chapter 389 Beneficiary Increase Paid			
			Subtotal			
4.	Ext	oense	Fund:			
	-		Board Members' Stipend			
			Staff Salaries			
	(c)	5304	Management Fees			
	(d)	5305	Custodial Fees			
	(e)	5307	Investment Consultant Fees			
	(f)	5308	Legal Expenses			
	(g)		Medical Expenses			
	(h)		Fiduciary Insurance			
	(i)		Service Contracts			
	(j)		Rent Expense			
	(k)		Professional Services			
	(I)		Actuarial Services			
			Accounting Services			
	(n)		Education and Training			
			Administrative Expenses			
	(p)		Furniture and Equipment			
	(q) (r)		Travel Expense Depreciation Expense: Building			
	(1)	J027	Subtotal			
			Subtotal			
		TOTA	AL DISBURSEMENTS			

Annual State	ement of the F	Retirement System for the Year	Ended December 31, 20	16
INVESTME	INT INCOME	2016	2015	2014
Investment	Income received from:			
(a) Cas	h (from Schedule 1)			
	ort Term Investments (from edule 2)			
(c) Fixe Sch	ed Income Securities (from edules 3A and 3C)			
	uities (from Schedules and 4C)			
(e) Poo	oled Funds (from Schedule 5)			
(f) Cor	mmission Recapture and Securities Litigat	tion		
4821 TOTA	AL INVESTMENT INCOME			
Plus:				
4884	Realized Gains (Profits)			
4886	Unrealized Gains (Increase in Market Value)			
1550	Interest/Dividends Due and Accrued- Current Year			
Less:				
4823	Paid Accrued Interest on Fixed Income Securities			
4885	Realized Losses			
4887	Unrealized Losses (Decrease in Market Value)			
1550	Interest/Dividends Due and Accrued- Prior Year			
NET INVES	TMENT INCOME			
Income Req	uired: Savings Fund (from			
Suppler	mentary Schedule)			
-	Reserve Fund			
Special	Military Service Credit Fund			
Expense	e Fund			
TOTAL INC	OME REQUIRED			
Net Investr	nent Income			
Less Incom	e Required			
EVALA 2 :::	COME TO DELICION DECENTE			
EXCESS IN	COME TO PENSION RESERVE FUND			

MEMBERSHIP FOR CURRENT YEAR				
ACTIVE MEMBERS Active Membership, Dec. 31st, Previous Year	Group 1	Group 2 & 4	TOTAL	
Inactive Membership, Dec. 31st, Previous Year Enrolled During Current Year				
Transfers Between Groups				
Reinstatements of Disabled Members				
SUBTOTAL Deduct:				
Death				
Withdrawals				
Retirements				
SUBTOTAL				
Active Membership, Dec. 31st, Current Year				
Inactive Membership, Dec. 31st, Current Year				
RETIRED MEMBERS, BENEFICIARIES & SU Retired, Beneficiary, and Survivor	JRVIVORS			
Membership, Dec. 31, previous year				
Retirements During the Year:				
Superannuation				
Ordinary Disability				
Accidental Disability				
Termination Retirement Allowance				
Beneficiary of Deceased Retiree				
Survivor Benefits from Active Membership				
SUBTOTAL				
Deduct:				
Deaths of Retired Members				
Terminations of Survivor Benefits				
Reinstatements of Disabled Pensions				
SUBTOTAL				
Retired Membership, Dec. 31, current year				
Superannuation Ordinary Disability				
Accidental Disability				
Termination				
Beneficiaries from Accidental Deaths				
Beneficiaries from Section 100				
Beneficiaries from Section 101				
Beneficiaries under Option (C)				
Option (D) Survivor Allowance				
Section 12B Survivor Allowance				
Total Retired, Beneficiary, and Survivor Membership, Dec. 31, Current Year				
TOTAL MEMBERSHIP:				
Active, Inactive, Retired, Beneficiary,				

Annual Statement of the ______ Retirement System for the Year Ended December 31, 2016

Annual Statement of the	_ Retirement System for the Year Ended December 31, 2016
-------------------------	--

Schedule A: Detail of Accounts Receivable and Accounts Payable

4004	Receivable	Amount	Original Date
4891	Members' Deductions		
4892	Transfers From Other Systems		
4893	Members' Make Up Payments and Redeposits		
4900	Members' Payments from Rollovers		
4898	3(8)(c) Reimbursements from Other Systems		
4899	Received from Commonwealth for COLA and Survivor Benefits		
4884	Realized Profits on Sale of Investments Credit		
4894	Pension Fund Appropriation (Current Fiscal Year)		
4894	Pension Fund Appropriation (Previous Fiscal Year)		
4890	Contributions Received from Municipality on Account of Military Service		
4897	Federal Grant Reimbursement		
4895	Pension Reserve Appropriation		
	ments Sold But Funds Not Received (list individually)		
TAL RE	ECEIVABLES		
	Payable		
5757	Refunds to Members		
5756	Transfers to Other Systems		
5750	Annuities Paid		
5759	Option B Refunds		
5751	Pensions Paid		
5755	3(8)(c) Reimbursements to Other Systems		
5752	COLAs Paid		
5753	Chapter 389 Beneficiary Increase Paid		
4885	Realized Loss on Sale of Investments		
5118	Board Members' Stipend		
5119	Staff Salaries		
5304	Management Fees		
5305	Custodial Fees		
5307	Investment Consultant Fees		
5308	Legal Expenses		
5309	Medical Expenses		
5310	Fiduciary Insurance		
5311	Service Contracts		
5312	Rent Expense		
	Professional Services		
5315	Education and Training		
5315 5320			
	<u> </u>		
5320	Administrative Expenses		
5320 5589	<u> </u>		

Retirement System for the Year Ended December 31, 2016 Annual Statement of the

Cash Account Activity During Year

*Cash defined in ledger #1040 as Savings or Checking

Description:(A)(B)(C)Type of Account, Account Number, Book Value at End Total Deposits Redeposited into Interest Rate (List alphabetically)Account Account

Withdrawals T during Year <u>@</u>

(E) (G)

=A+B+C-D Cash Income Paid to
Total Book Value System Not Reinvested Interest Due and Accrued
Dec 31st This Year or Redeposited December 31st

Annual Statement of the

Retirement System for the Year Ended December 31, 2016

Short Term Securities* Bought and Sold or Matured During the Year as well as Still Held on December 31st

*Short Term defined in ledger #1100 as U.S. Treasury Bills, Commercial Paper, Repurchase Agreements, CDs, Term Deposits, Money Market, Cooperative Shares, Savings and Loan Shares

<u>O</u> <u>@</u> € **Description:**

Acquired Date Rate, Maturity Date (List alphabetically. Rolled over securities must be listed as Including CUSIP or Account No., Interest sold and then repurchased.)

(Expiration or Upon Liquidation) (**D**) Amount Received at Maturity

Cost Including Less Commissions and Commissions Excluding Interest

<u>Par</u> Value*

Excluding Interest

Market Value Dec. Interest Received Due and Accrued 31st Current Year During Year Dec. 31st 31st Current Year

<u>©</u>

Ē

Œ

Schedule No. 3A

Retirement System for the Year Ended December 31, 2016 Annual Statement of the

Domestic Fixed Income Securities Owned at End of Year

(Foreign Fixed Income Securities must be listed on Schedule 5)

Description: (A) (B) (C) (D)

Interest Received During Year Accrued Dec. 31st <u>©</u> Interest Due and Ē Unrealized Gain Unrealized Loss Market Value Œ (B) Cost or Market Value at End of Including Maturity Date and Interest Rate (List Alphabetically) CUSIP Number* Prior Year

*Optional Entry

Annual Statement of the

Domestic Fixed Income Securities Purchased During Year

Retirement System for the Year Ended December 31, 2016

(Foreign Fixed Income Securities must be listed on Schedule 5)

<u>B</u> ₹ **Description:** Including Maturity Date and

Interest Rate (List Alphabetically) CUSIP Number Par Value*

<u>@</u> (**C**) Date Acquired (Trade Date)

Name of Broker Commissions Paid Accrued Interest

Ē

Œ

(G)
Cost Excluding Accrued Interest,
but Including Commissions

Schedule No. 3C

Retirement System for the Year Ended December 31, 2016 Annual Statement of the

			ement ayatem i	מו נווכ וכמו ד	nemement system for the real bluck December 31, 2010	21, 2010				
Domestic Fixed Income Securities Sold During Year (Foreign Fixed Income Securities must be listed on Schedule 5)	e Securitie Securities n	is Sold Durin nust be listed	ng Year I on Schedule	5)						
Description: Including Date of Maturity and Interest		(B)	(C) Date Sold or Matured	(D) Name of	(E)	(F) Market Value Previous		(H)	(I) F G F	(J) Interest Received During Year Including
Rate (List alphabetically)	Number	Par Value*	Par Value* (Trade Date)	<u>Broker</u>	Commissions	Dec 31st	Interest	Realized Gain	Realized Loss Interest Sold	Interest Sold

Schedule No. 4A

Annual Statement of the

Retirement System for the Year Ended December 31, 2016

Equities Owned at End of Year Equities defined as stocks or options (Pooled Funds must be listed on Schedule 5)

Schedule No. 4B

Retirement System for the Year Ended December 31, 2016 Annual Statement of the

Equities Purchased During Year Equities defined as stocks or options (Pooled Funds must be listed on Schedule 5)

Description: Give Complete Description

(List Alphabetically)

(F)
Cost to System Including
Commissions and Fees Name of Broker Commissions and Fees Paid Œ <u>@</u> (C) Date Acquired (Trade Date) Number of Shares <u>@</u> **CUSIP Number** ₹

Schedule No. 4C

Annual Statement of the

Retirement System for the Year Ended December 31, 2016

Equities Sold During Year Equities defined as stocks or options (Pooled Funds must be listed on Schedule 5)

Give Complete		j	(5)	Ē	9	Ē	Ξ	<u> </u>
alollo					Market Value at			
alollo (Prior Year-end or			Dividends
			Commissions	Proceeds from	Cost if Purchased in	= F - G	= F - G	Received
alphabetically) Number of Shares	Name of Broker	Date Sold	<u>Paid</u>	<u>Sale</u>	Current Year	Realized Gain	Realized Loss	During Year

Annual Statement of the

Retirement System for the Year Ended December 31, 2016

Schedule of Pooled FundsThis schedule is to be used for the PRIT Fund and Pooled Funds (e.g. , Venture Capital, Real Estate, Mutual Funds, Commingled Funds).

(K)	= A+B+C+D-E+F-G-H-I-J	Market Value at End of	Year**
ĵ.		Fees	Paid
€		Distributions to	
(H) Total Sales/ Redemptions	this Year -	Amount	Received
(9)		Unrealized	Loss*
(F)		Unrealized	Gain*
(E)		Realized	Loss*
Q)		Realized	<u>Gain*</u>
(C)		Investment	Income
(B) Total	Purchases	This Year	at Cost
(A) Market Value at		_	Year
Description: Give Complete	Description	(List alphabeticall)	by category)
	PERAC	Ledger	Number

* If available.
 ** If using most recent period prior to year-end, please list date.

bage a Statement of the

Retirement System for the Year Ended December 31, 2016

Summary of Investments Owned

zo t e C	ory of Is	Category of Investment	Current Market	Interest Due and Accrued as of	Paid Accrued Interest on Purchases in	Commissions Paid During Unrea	Unrealized	Unrealized	Realized	Realized	Investment Income Received
Caley	20 0		value	Dec. 31, 2010	כחו בוור ובמו		≅	<u> </u>	Callis	<u> </u>	Dulliy real
-	1040	Cash									
2.	1100	Individually Owned Short Term Investments									
3.	1180	Fixed Income Securities									
4	1170	Equities									
5a.	1101	Pooled Short Term Funds									
5b.	1172	Pooled Domestic Equity Funds									
5c.	1173	Pooled International Equity Funds									
5d.	1174	Pooled Global Equity Funds									
5e.	1181	Pooled Domestic Fixed Income Funds									
5f.	1182	Pooled International Fixed Income Funds									
5g.	1183	Pooled Global Fixed Income Funds									
5h.	1193	Pooled Alternative Investments / Private Equity									
5i.	1194	Pooled Real Estate Funds									
5j.	1195	Pooled Domestic Balanced Funds									
5k.	1196	Pooled International Balanced Funds									
51.	1197	Hedge Funds									
5m.	1198	PRIT Cash Fund									
5n.	1199	PRIT Core Fund									

Method (Net, Check, Wire)

*Payment

Schedule No. 7

Supplementary Schedule

Retirement System for the Year Ended December 31, 2016 Annual Statement of the

Members' Balances in the Annuity Savings Account

Transfer to Transfer to Pension Balance
Pension Fund Reserve Fund Current Year Transfer to Annuity Reserves Reductions Total Interest Current Year Total Additions Current Year Previous <u>Balance</u> Member's Name

page **20**